



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

148. BY ARTEMAS MARTIN, ERIE, PA.—A tortoise, whose shell is circular, radius a , is moving in a straight line at the uniform speed of m feet per minute, and a fly is running around on the edge of its shell at the uniform rate of n feet per minute.

Required the equation to the curve the fly describes in space.

149. FROM TODHUNTER'S INTEGRAL CAL., P. 164, BY REQUEST OF H. HEATON.—Prove that

$$\int_0^a \frac{dx}{\sqrt{(2ax-x^2)}\sqrt{(a^2-x^2)}} = \frac{2}{3a} F\left(c\frac{\pi}{2}\right), \text{ where } c = \frac{1}{3}.$$

150. FROM THE JOURNAL OF PROGRESS. — An underwriter insures three vessels, the first an iron steamer, the second a steamer not of iron and the third a sailing vessel, at \$20,000, \$15,000, and \$10,000, respectively. One of them is known to have been burned at sea; and three persons, A , B , C , whose respective veracities are $\frac{3}{4}$, $\frac{4}{5}$, and $\frac{5}{6}$, report as follows: A , that the lost vessel was an iron steamer; B , that it was not a sailing vessel; and C , that it was a sailing vessel. Required the expectation of loss to the underwriter, the *a priori* probability of destruction by fire being twice as great in case of a steamer as of a sailing vessel.

BOOK NOTICES.

A Treatise on the Theory and Solution of Algebraical Equations. By JOHN MACNIE, A. M. A. S. Barnes and Company, N. Y., Chicago, & New Orleans. Octavo. 184 pages. 1876.

In this book the author presents the Theory of equations, Solution of equations by general formulas, Sturm's Theorem, Horner's method of approximation, an analysis of equations by Fourier's theorem, &c., in a concise and lucid manner.

Students of Algebra will not fail to be interested and instructed from a perusal of this book.

Interpolation and Adjustment of Series, By E. L. DE FOREST. New Haven. 1876.

This is a pamphlet of 50 pages and is a continuation of two other papers on the same subject which were published in the Annual Reports of the Smithsonian Institution, for the years 1871 and 1872.

ERRATUM.

On page 172, (Vol. III) line 6, for Put $r + x = \sqrt[n]{a}$, read, Put $r = \sqrt[n]{a}$.